

Title (en)
EXHAUST-GAS POWER-RECOVERY TURBINE FOR A TURBO COMPOUND SYSTEM

Title (de)
ABGASNUTZTURBINE FÜR EIN TURBO-COMPOUND-SYSTEM

Title (fr)
TURBINE À GAZ D'ÉCHAPPEMENT POUR UN SYSTÈME DE TURBORÉCUPÉRATION

Publication
EP 2470753 A1 20120704 (DE)

Application
EP 10742761 A 20100806

Priority
• DE 102009038772 A 20090827
• EP 2010004817 W 20100806

Abstract (en)
[origin: WO2011023282A1] The invention relates to an exhaust-gas power-recovery turbine (1) for a turbo compound system, in particular of a motor vehicle, comprising - a turbine shaft (2), which at the first end thereof or in the area of the first end carries a rotor (1.1) to be acted upon by the exhaust gas flow of an internal combustion engine in order to convert exhaust gas energy into drive power; and - which at the second end thereof carries a pinion (3), which is designed to be brought into a driving connection with the crankshaft of the internal combustion engine in order to transmit the drive power to the crankshaft. The invention is characterized in that - the turbine shaft is supported in the area of the rotor by means of a radial plain bearing (4) and in the area of the pinion by means of a radial rolling-element bearing (5).

IPC 8 full level
F01D 25/16 (2006.01); **F02C 6/12** (2006.01); **F16C 19/54** (2006.01); **F16C 21/00** (2006.01); **F16C 27/02** (2006.01); **F16C 27/04** (2006.01)

CPC (source: EP US)
F01D 15/02 (2013.01 - EP US); **F01D 25/16** (2013.01 - EP US); **F01D 25/166** (2013.01 - EP US); **F02C 6/12** (2013.01 - EP US);
F16C 19/54 (2013.01 - EP US); **F16C 21/00** (2013.01 - EP US); **F16C 27/02** (2013.01 - EP US); **F05D 2220/40** (2013.01 - EP US);
F05D 2240/53 (2013.01 - EP US); **F05D 2260/4031** (2013.01 - EP US); **F16C 17/18** (2013.01 - EP US); **F16C 27/045** (2013.01 - EP US);
F16C 2360/00 (2013.01 - EP); **F16C 2360/24** (2013.01 - US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)
See references of WO 2011023282A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
DE 102009038772 A1 20110303; DE 102009038772 A8 20110601; BR 112012001960 A2 20190924; CN 102421992 A 20120418;
EP 2470753 A1 20120704; JP 2013503283 A 20130131; RU 2012106824 A 20131010; US 2012297770 A1 20121129;
WO 2011023282 A1 20110303

DOCDB simple family (application)
DE 102009038772 A 20090827; BR 112012001960 A 20100806; CN 201080020035 A 20100806; EP 10742761 A 20100806;
EP 2010004817 W 20100806; JP 2012525899 A 20100806; RU 2012106824 A 20100806; US 201113305935 A 20111129